

PATENT SPECIFICATION

344,704

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COMPLETE SPECIFICATION.



Improvements in or relating to Reels for Fire Hose and the like.

We, REGINALD SMITH, of J. S. SMITH, LIMITED, of Goldsmith Place, Sherwood Street, Nottingham, and JAMES MORRIS of JOHN MORRIS AND SONS, LIMITED, of Salford Fire Engine Works, Cross Lane, Salford, Manchester, both British Subjects, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

"This invention has relation to reels for fire hose and the like and has reference to that type in which the reel is supported in a rotatable manner on a carrier which is itself capable of a swivelling movement about an axis at right angles to the axis of the reel.

The object of this invention is to construct a reel of the above type which shall be more compact than heretofore and shall be devoid of loose pipe connections.

According to the present invention, in a reel of the type above referred to water is supplied to the hose on the reel through a duct or passage extending through the body of a wall bracket or its equivalent to the axis of swivelling movement of the reel carrier.

Additionally, in the improved device the reel carrier is cast with a hollow portion constituting a water supply passage extending from the swivel joint of said carrier to the reel axle.

For the purpose of more fully describing the nature of this invention reference will now be made to the accompanying drawings, wherein:—

Figure 1 is a side elevational view of a device according to this invention.

Figure 2 is a front elevation of Figure 1 somewhat reduced.

Figure 3 is a part-sectional side elevation of Figure 1.

In the method of carrying out the invention as illustrated in the drawings, the reel carrying the hose 1 is composed of drum 2 carried midway in its length by wheel 3 fixed by screw or otherwise to a hollow axle 4, end hose-retaining rings 5 being carried from the drum 2 by radial arms 6.

The hollow axle 4 is rotatably carried in

bearings at the upper ends of the upstanding arms of a U-shaped reel carrier 7, said carrier being connected by a swivel joint to the outer part of a bracket 8 which is suitably fixed to a wall or other convenient structure.

The joint between the carrier 7 and bracket 8 permits of said carrier being swivelled on an axis at right angles to that of the reel itself. This joint may be comprised by a hollow stem 9 fixed by its flange 10 to the underside of the carrier base portion midway in the length thereof, said stem having screwed thereon a nut 11 which retains same in a rotatable manner within a cup or housing 12 screwed to and projecting up from the outer end of the bracket 8. A centring nut or plug 13 for the stem 9 is screwed into the lower part of the cup 12, said stem turning freely in said nut, and suitable packing is assembled between the two nuts 11 and 13.

The wall bracket 8 is a hollow cast member fixed in position by a flange 14, said bracket having cast therein a water duct 15 extending through the body of the bracket and which may comprise horizontal and vertical passages 15a, 15b. The vertical passage 15b is placed in communication with a water supply pipe 16 fitted with control valve 17. The horizontal passage 15a opens into a hollow end 15c of bracket 8 and communicates with the hollow stem 9 of the swivel joint between the said bracket and the reel carrier 7.

One half of the U-shaped carrier 7 is cast hollow to provide a water duct 18 extending from the swivel joint to the one end of the hollow reel axle 4, said axle being formed at or near its opposite end with a hollow radially projecting arm 19, the outer end of which arm has associated therewith a suitable union for connection of the one end of the hose 1. The free end of the hose is provided with the usual nozzle 1a.

The arrangement is such that water from the pipe 16 is delivered to the hose 1 by way of duct 15 in the bracket 8, hollow stem 9 of the swivel joint, duct 18 in the reel carrier, reel axle 4 and branch 19. In this way no flexible pipes are

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required, and between the position at which the water enters the wall bracket 8 and the hose 1 no exterior pipes are employed. The connection of the pipe 16 to the bracket 8 may be in close proximity to the wall, so that the reel when positioned takes up a minimum amount of space. As will be appreciated there are no loose parts required and by virtue of the supply valve being arranged in the manner described the reel is self-contained. That is to say, when the reel is delivered to the purchaser it is merely necessary to bolt the wall bracket to the wall and connect a supply valve to the water main, when the reel is ready for use without the addition of any attachments and without adjustments.

The joint between the reel axle 4 and the upper end of carrier arm containing the duct 18 is rendered water-tight by any approved form of packed gland 20, which permits rotation of said axle. The opposite end of the axle 4 may comprise an extension having a solid portion 4a carried in a bearing, said extension having integral therewith the hollow branch 19 and being screwed or otherwise secured to the main part of the axle.

Having now particularly described and ascertained the nature of our said invention and in what manner the same is to be performed, we declare that what we claim is:—

1. A fire hose or like reel of the type

referred to and wherein water is supplied to the hose on the reel through a duct or passage extending through the body of a wall bracket or its equivalent to the axis of swivelling movement of the reel carrier.

2. A fire hose or like reel comprising, in combination, a wall bracket or the like having a water passage extending through the body of the bracket and a reel carrier rotatably accommodating a hose and mounted to swivel on said bracket, and said reel carrier having formed integrally therewith a water passage extending from the swivel joint to the axis of rotation of the reel in said carrier.

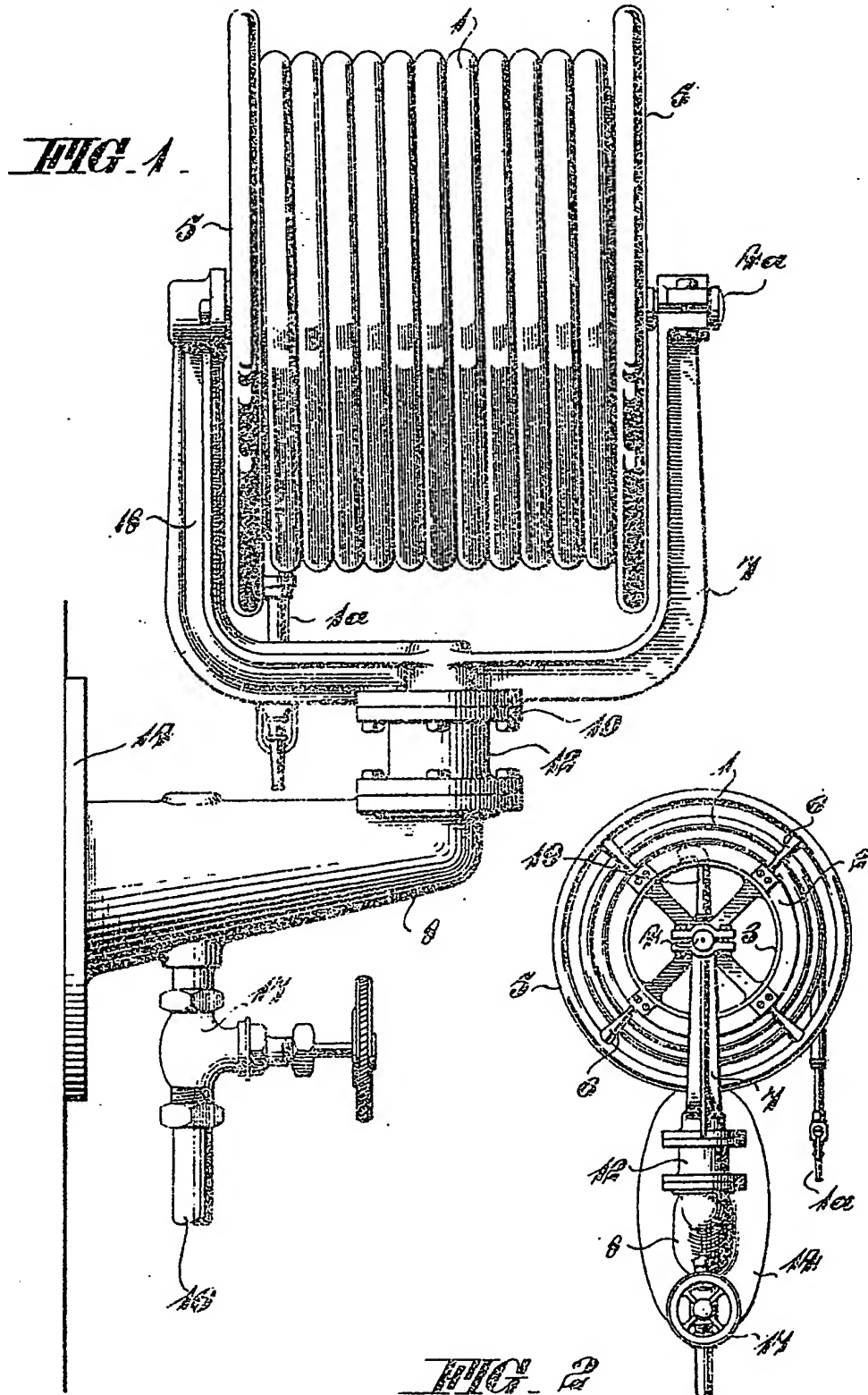
3. A fire hose or like reel as claimed in the last preceding claim characterised in that the reel carrier is of U shape having its one half formed hollow to provide a water supply duct from the swivel joint to the reel axis.

4. A fire hose or like reel as claimed in either of claims 2 or 3 and in which the axle of the reel is hollow and constitutes a water duct from which the water is supplied to the hose through a hollow arm projecting laterally from said axle.

5. A fire hose or like reel constructed, arranged and operating substantially as hereinbefore described with reference to the accompanying drawings.

Dated this 23rd day of April, 1930.

ERIC POTTER,
Chartered Patent Agent,
London and Nottingham.



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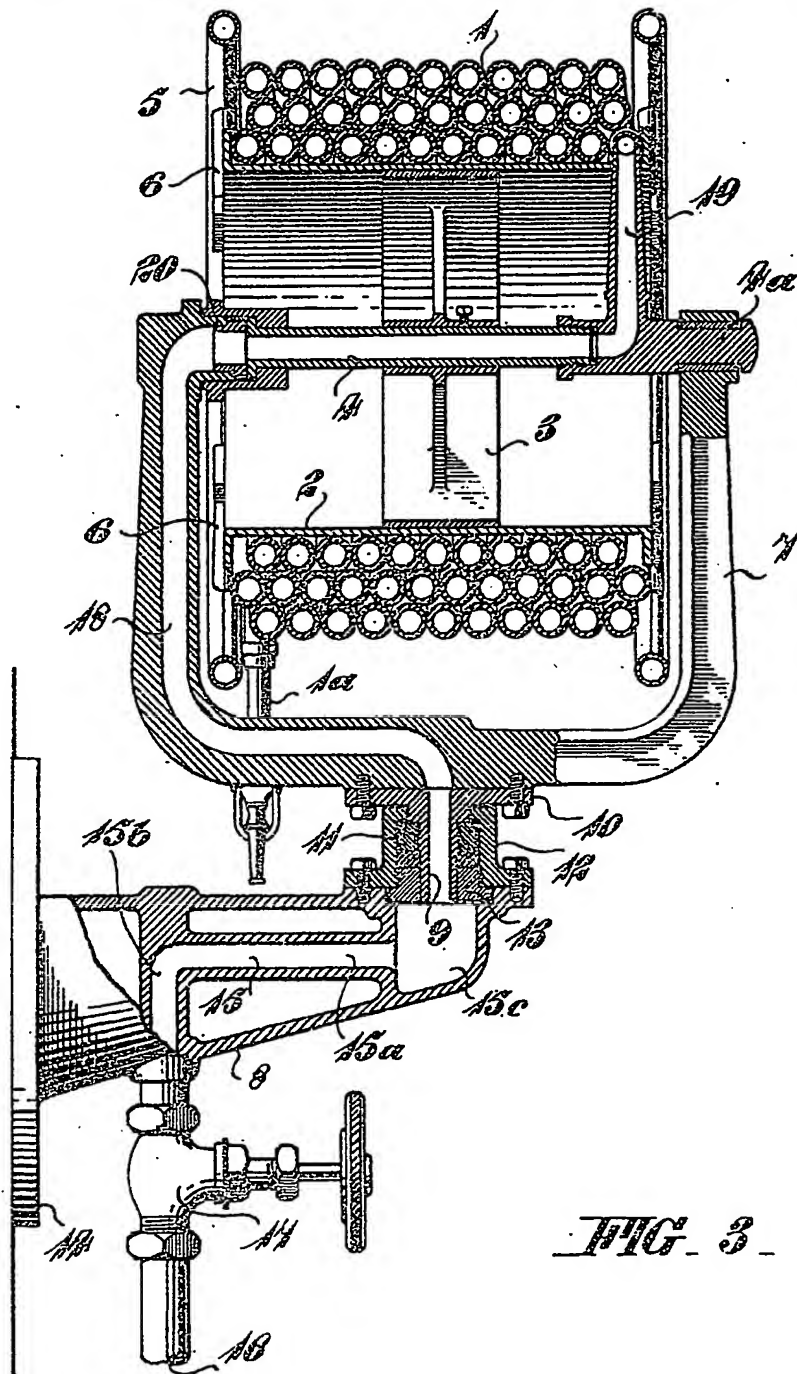
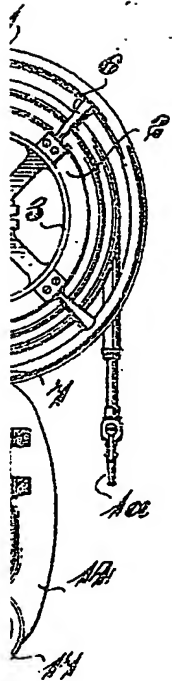


FIG. 3

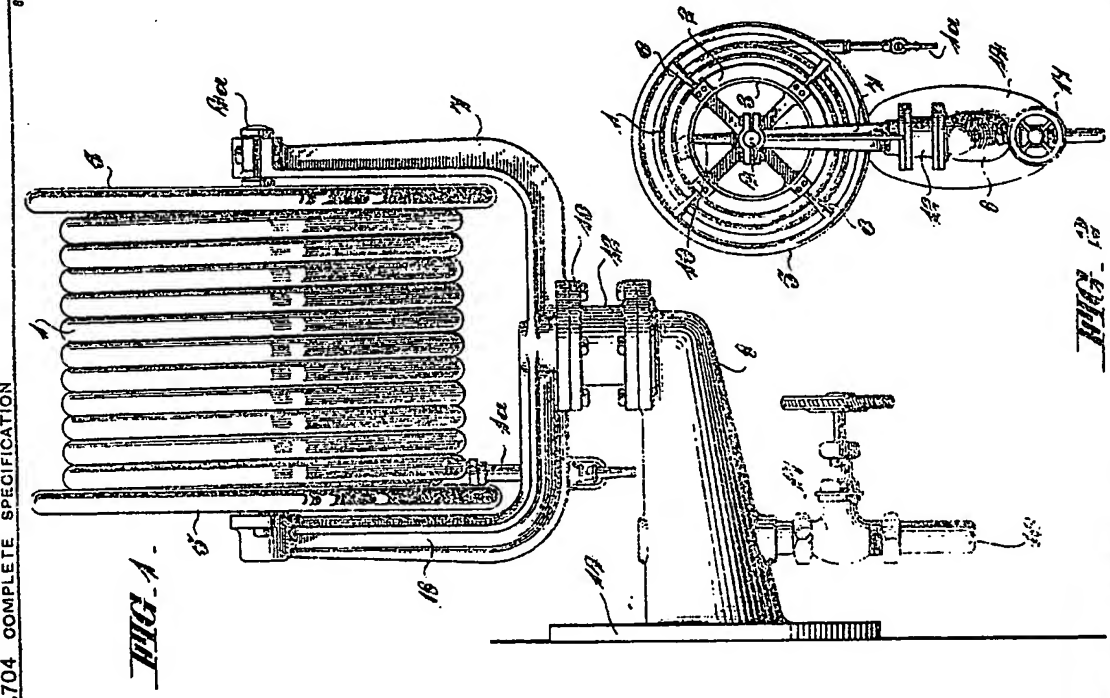


FIG. 1.

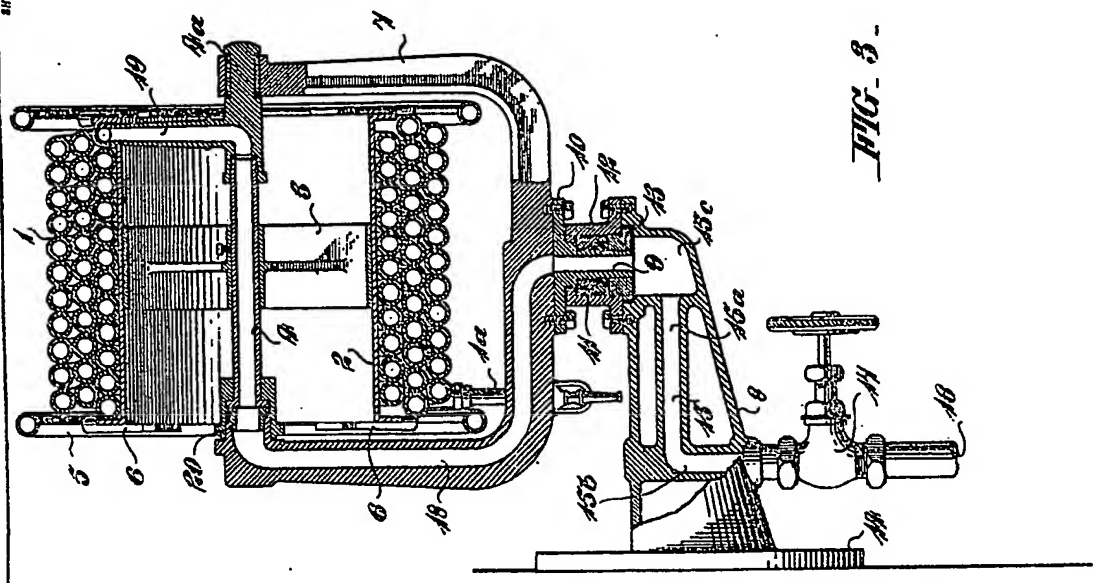


FIG. 3.

[This Drawing is a reproduction of the Original on a reduced scale]